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### (54) **THERMALLY REVERSIBLE HYDROGEL MATERIAL**

(57)Abstract:

PURPOSE: To provide a thermally reversible hydrogel material which becomes soluble in water at low temperatures and becomes a hydrogel retaining a large amount of water at elevated temperatures.

CONSTITUTION: A thermally reversible hydrogel is a polymeric substance which is formed of a temperature-sensitive polymeric compound having an LCST bonded to a water soluble polymeric compound and has a plurality of portions of said temperature-sensitive polymeric compound having an LCST in one molecule.